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# NASA Policy Directive

**NPD 8500.1B**

Effective Date: December 20, 2007

Expiration Date: December 20, 2012

**COMPLIANCE IS MANDATORY**[Printable Format \(PDF\)](#)

Request Notification of Change

 (NASA Only)

## **Subject: NASA Environmental Management**

**Responsible Office: Environmental Management Division**

### **1. POLICY**

a. Environmental management, a cross-cutting management strategy of the NASA Strategic Plan, supports NASA's missions, protects mission resources, and mitigates environmentally driven mission risks, while maintaining environmental stewardship of assets, controls over environmental responsibilities, and compliance with applicable legal and other requirements. In carrying out this strategy, NASA shall: (1) provide direct mission support by implementing environmental planning in program and project planning; (2) proactively reduce NASA's exposure to environmental, institutional, programmatic, and operations risks; and (3) pursue environmental initiatives designed to restore, protect, and enhance mission resources. Furthermore, NASA is committed to prevention of pollution and continual improvement of its environmental program. This NASA Policy Directive (NPD) has been issued to be consistent with, and incorporates by reference, 14 C.F.R. Subpart 1216.1, Policy on Environmental Quality and Control.

b. To carry out its environmental policy, NASA shall:

(1) Maintain an environmental management system, as required by NASA Procedural Requirement (NPR) 8553.1, at all appropriate organizational levels that establishes priority environmental aspects and impacts resulting from its activities, products, and services; provides a framework for setting and reviewing environmental objectives and targets; and establishes processes for communication of environmental aspects with persons working for or on behalf of NASA and the public. The environmental management system shall be used as a tool to address all environmental aspects of internal NASA operations and activities.

(2) Endeavor to maintain compliance with all applicable requirements of Federal statutes, regulations, and Executive Orders; state, local, or territorial environmental laws and regulations; and NASA's requirements and agreements with other agencies, industry, and/or organizations.

(3) Incorporate sustainable practices to the extent practicable throughout programs, projects, and activities, including planning, development, implementation, and operational phases to create and maintain conditions under which the mission, humans, and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations of Americans. As defined by Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management, and the Instructions for Implementing Executive Order 13423, sustainable practices include, but are not limited to:

- (a) Improvement in energy efficiency and reduction in greenhouse gas emissions.
- (b) Use of renewable energy.
- (c) Reduction in water consumption.
- (d) Sustainable acquisition of recycled content, energy-efficient, biobased, and environmentally preferable products and services.
- (e) Reduction of the use and disposal of toxic and hazardous chemicals and materials.
- (f) Waste-prevention and recycling programs.
- (g) High-performance and sustainable buildings.
- (h) Efficient fleet-management programs.
- (i) Electronics stewardship.

(4) In the management of programs, projects, and activities, as defined in NPD 7120.4, Program/Project Management, and related documents, consider environmental factors throughout the life cycle of programs,

projects, and activities, including planning, development, execution, and disposition activities. Examples of environmental factors include consideration of environmental impacts as required by the National Environmental Policy Act; the National Historic Preservation Act; the proposed use of hazardous materials; the potential for waste generation; the need to acquire necessary permits, waivers, and authorizations; and the use of environmentally preferable materials and processes wherever practicable.

(5) When addressing environmental factors, include, in the life-cycle analysis of costs, the potential environmental impacts of programmatic activities and the use of materials that may be phased out of production due to environmental laws and regulations and their supporting institutional processes and costs of mitigating such impacts.

(6) Foster and actively support environmentally related technology transfers.

(7) Actively communicate, coordinate, and cooperate with Federal, state, local regulatory agencies, and nongovernmental organizations to leverage available resources and comply with environmental requirements, prevent pollution, reduce waste generation, manage cultural and natural resources, and establish other goals and objectives in the most effective manner possible.

## **2. APPLICABILITY**

This NPD applies to NASA Headquarters and Centers, including Component Facilities, and to the Jet Propulsion Laboratory to the extent specified in its contract.

## **3. AUTHORITY**

42 U.S.C. 2473(c)(1), Section 203(c)(1) of the National Aeronautics and Space Act of 1958, as amended.

## **4. APPLICABLE DOCUMENTS**

- a. National Energy Conservation Policy Act, as amended (42 U.S.C. 8251, et. seq.).
- b. National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et. seq.).
- c. National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 et. seq.).
- d. 14 C.F.R. 1216, Environmental Quality.
- e. Executive Order 13287, Preserve America.
- f. Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management.
- g. Instructions for Implementing Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management.
- h. NPD 1001.0, 2006 NASA Strategic Plan.
- i. NPD 7120.4, Program/Project Management.
- j. NPR 8553.1, NASA Environmental Management System (EMS).
- k. NPR 8570.1, Energy Efficiency and Water Conservation.
- l. NPR 8580.1, Implementing the National Environmental Policy Act and Executive Order 12114.

## **5. RESPONSIBILITY**

a. Every NASA employee is responsible for:

- (1) Complying with environmental regulations and NASA policy related to official duties.
- (2) Helping the Centers achieve their environmental objectives and targets.

b. Each NASA organizational element is responsible for:

- (1) Incorporating this environmental policy into planning and budgeting.
- (2) Allocating and maintaining appropriate levels of authority and funding.
- (3) Ensuring appropriate training is available and provided.
- (4) Overseeing environmental process and material selection.
- (5) Incorporating sustainable practices in its missions and activities.

c. The Assistant Administrator for Infrastructure and Administration executes the following activities through the Director, Environmental Management Division and other division directors:

- (1) Develops, maintains, and executes the Agency's environmental management strategy, policy and guidance, and environmental risk management program.
- (2) In cooperation with and in support of the Mission Directorates, Mission Support Offices, and NASA Centers and Component Facilities, advocates, supports, manages, allocates, and assigns environmental resources as defined

and budgeted by the Agency, including applicable financial accounting and reporting responsibilities.

(3) Establishes requirements of the NASA environmental management system, including guidance for Centers to identify and prioritize environmental aspects, impacts, risks, objectives, and targets. Periodically reviews its status at Headquarters and across the Agency and reports significant issues to senior Agency officials and the Operations Management Council.

(4) Serves as the NASA senior official for external Agency-level interfaces on domestic environmental matters in accordance with Executive Order 13423 and supports the Office of External Relations and the Office of the General Counsel on international environmental matters.

(5) Serves as, or designates a NASA official to serve as, coordinator for implementing NASA's National Environmental Policy Act regulations, NPR 8580.1, and activities as defined by 14 C.F.R. 1216, Environmental Quality.

(6) Designates the Senior Policy Official and Federal Preservation Officer in accordance with the National Historic Preservation Act and Executive Order 13287.

(7) Designates the member of the Interagency Energy Management Task Force established in the National Energy Conservation Policy Act.

(8) Provides functional oversight and conducts functional reviews to ensure that environmental activities are conducted in accordance with statutory, regulatory, and financial accounting and reporting requirements. Functional-review results shall be reported to Center Directors and appropriate Agency officials when Agency-wide issues, problems, successes, and opportunities are involved.

(9) Provides technical advice, assistance, and consultation to responsible managers of the Mission Directorates, Mission Support Offices, and NASA Centers and Component Facilities based on overall awareness and insight of Agency program execution and national requirements.

(10) Ensures the appropriate coordination and approval of Principal Centers to lead or oversee designated environmental initiatives or activities.

(11) Serves on NASA advisory boards and panels in accordance with their charters.

(12) Advocates and supports the effective development and execution of environmental and energy conservation training to include professional development and education initiatives that promotes the knowledge and proficiency of the NASA workforce for understanding the requirements, concepts, and techniques of environmental management and sustainable practices.

d. Associate Administrators, Assistant Administrators, Chiefs, Directors of Mission Directorates and Mission Support Offices, and program and project managers are responsible for:

(1) Implementing environmental policies and requirements within existing missions, programs, projects, and activities including life-cycle planning, development, execution, and disposition activities.

(2) Ensuring that requirements of NEPA are satisfied for any proposed new or modified missions, programs, projects, and activities.

(3) Coordinating with the affected Center environmental managers on both existing and new missions, programs, projects, and activities to ensure compliance with law and the effective implementation of environmental requirements.

e. Center Directors are responsible for:

(1) Ensuring that the Center and each Component Facility under their cognizance have a designated environmental manager with a direct line of authority from the appropriate Center official.

(2) Ensuring that the Center and each Component Facility under their management cognizance have a designated energy/water manager with a direct line of authority from the appropriate Center official.

(3) Providing sufficient qualified staff and the resources required to perform environmental and energy/water conservation activities, including the environmental management system and implementation of sustainable practices.

(4) Ensuring implementation of Agency environmental management and sustainable practices functional leadership activities, policies, regulations, and procedural requirements.

(5) Providing support and oversight of the environmental and energy/water management programs, including the environmental management system and implementation of sustainable practices.

(6) Ensuring effective development and execution of environmental management and sustainable practices training, including professional development and education initiatives that promotes the knowledge and proficiency of the

NASA Workforce in environmental management and sustainable practices concepts and techniques.

(7) In collaboration with the NASA Headquarters Office of Infrastructure and Administration, establishing oversight and evaluating Center operations through functional reviews, performance metrics, or other means to ascertain that appropriate environmental compliance and management techniques are used for the identification, documentation, evaluation, and disposition of all environmental requirements for programs, projects, facilities, systems, and operations. This includes responding to environmental and energy data calls from Headquarters.

(8) Supporting effective environmental communication within the Center and with the interested community.

f. Center and Component Facility environmental managers are responsible for the following:

(1) Coordinating with all internal organizations to ensure compliance with the law and effective implementation of environmental policies, procedures, and processes to reduce risk to mission.

(2) Advocating, managing, and allocating assigned environmental program resources, both for the Environmental Compliance and Restoration Program and programs supported by Center resources and direct reimbursements.

(3) Serving as the local source of expertise on environmental policies, procedures, requirements, and processes.

(4) Supporting functional reviews as necessary to ensure that Center programs, projects, facilities, systems, and operations comply with all environmental requirements.

(5) Serving on NASA advisory boards, panels, and working groups in accordance with their charters as coordinated and approved by local and Headquarters Senior Management.

(6) Reporting information regarding environmental management activities to the Assistant Administrator for Infrastructure and Administration or the designee.

g. Center and Component Facility energy and water management responsibilities are established by NPR 8570.1, Energy Efficiency and Water Conservation.

## 6. DELEGATION OF AUTHORITY

None.

## 7. MEASUREMENTS

The majority of environmental and energy regulations include specific requirements to assess compliance. These requirements are monitored by external regulatory agencies and through Headquarters environmental functional reviews to ensure compliance with requirements of the relevant laws. NASA's internal metrics for environmental management cover compliance, restoration, and conservation measures to meet reporting requirements of the Office of Management and Budget and other external oversight agencies.

## 8. CANCELLATION

NPD 8500.1A dated April 6, 2000.

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**/s/ Michael D. Griffin**  
**Administrator**

### ATTACHMENT A:

None.

### (URL for Graphic)

None.

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